

Amendments to the Claims

Claims 1, 19, 27 and 28 are amended. Claims 1-29 are pending upon entry of this amendment. Changes to the claims are provided in the below listing of claims.

Listing of Claims

1. (Currently amended) A method of amplifying gene expression in a moss plant cell by increasing the copy number of integrated transforming DNA constructs, the method comprising:

- 1) providing at least a first heterologous nucleic acid construct comprising at least one heterologous nucleotide sequence operably linked to a promoter, wherein said construct is flanked at the 5' end thereof by a first recombination sequence and is flanked at the 3' end of said construct by a second recombination sequence;
- 2) providing at least a second heterologous nucleic acid construct different from the first, said second construct comprising at least one heterologous nucleotide sequence operably linked to a promoter, wherein said construct is flanked at the 5' end thereof by said second recombination sequence and is flanked at the 3' end of said construct by said first recombination sequence;
- 3) transforming into the moss plant cell at least said first and said second heterologous nucleic acid constructs; and
- 4) regenerating the transformed moss plant cell into moss protonema comprising a plurality of copies of said at least one heterologous nucleotide sequence;

wherein said first recombination sequence differs from said second recombination sequence and wherein recombination occurs between said different constructs at said first recombination sequences and at said second recombination sequences after

~~transformation form a set of recombination sequences designed to enable said at least first and said at least second constructs to recombine with each other *in vivo*.~~

2. (Previously presented) A method according to claim 1 wherein said at least first construct and said at least second construct are co-transformed into a moss protoplast.

3. (Canceled)

4. (Previously presented) A method according to claim 1 wherein the recombination sequences are selected from the group consisting of genomic DNA, cDNA, intron, a non-coding region or an exon, and a combination thereof.

5. (Original) A method according to claim 4 wherein the recombination sequence is selected from an intron or non-coding region.

6. (Original) A method according to claim 4 wherein the length of the recombination sequences is from 25 to 1000 nucleotides long.

7. (Original) A method according to claim 6 wherein the length of the recombination sequences is from 50-650 nucleotides long.

8. (Original) A method according to claim 7 wherein the length of the recombination sequences is from 100-400 nucleotides long.

9 – 18 (Canceled)

19. (Currently amended) A set of nucleic acid vectors suitable for amplifying gene expression in a moss plant cell, wherein said set of nucleic acid vectors comprises:

- 1) at least a first heterologous nucleic acid construct comprising at least one heterologous nucleotide sequence operably linked to a promoter, wherein said construct is flanked at the 5' end thereof by a first recombination sequence and is flanked at the 3' end of said construct by a second recombination sequence; and
- 2) at least a second heterologous nucleic acid construct different from the first, said second construct comprising at least one heterologous nucleotide sequence operably linked to a promoter, wherein said construct is flanked at the 5' end thereof by said second recombination sequence and is flanked at the 3' end of said construct by said first recombination sequence;

wherein said first recombination sequence differs from said second recombination sequence and wherein said first and said second recombination sequences permit recombination *in vivo* between said different constructs at said first recombination sequences and at said second recombination sequences ~~form a set of recombination sequences designed to enable said at least first and said at least second constructs to recombine with each other *in vivo*.~~

20. (Previously presented) A set of nucleic acid vectors according to claim 19, wherein the constructs are linear DNA constructs.

21. (Previously presented) A moss cell transformed with a set of nucleic acid vectors as defined in claim 19.

22. (Previously presented) A moss cell according to claim 21 which is a moss protoplast or a moss protonema cell.

23. (Previously presented) A moss cell according to claim 22 which is *Physcomitrella patens*.

24. (Previously presented) Moss protonema tissue comprised of cells transformed with a set of nucleic acid vectors as defined in claim 19.

25. (Previously presented) Use of moss protonema cells transformed with a set of nucleic acid vectors in the production of protein therefrom, comprising

- 1) providing moss protonema cells transformed with the set of DNA vectors according to claim 19; and
- 2) inducing expression of protein encoded in said DNA constructs.

26. (Previously presented) Use according to claim 25 wherein said moss protonema cells are *Physcomitrella patens*.

27. (Currently amended) A method according to claim 1 further wherein ~~said set of recombination sequences enable integration of~~ heterologous sequences obtained from said recombination are integrated ~~recombined at least first and at least second constructs into the~~ moss plant cell's genome.

28. (Currently amended) A set of nucleic acid vectors according to claim 19 further wherein said ~~set of~~ first and second recombination sequences ~~enable~~ permit integration of heterologous sequences obtained from said recombination ~~recombined at least first and at least second constructs into the moss plant cell's genome.~~

29. (Previously presented) A set of nucleic acid vectors according to claim 19 wherein said recombination sequences are selected from the group consisting of genomic DNA, cDNA, an intron, a non-coding region or an exon, and a combination thereof.